CHAPTER VIII – WATER, NATURAL & AGRICULTURAL RESOURCES

Scott County contains a diverse array of water, natural and agricultural resources that play an important role in shaping the County's quality of life, local economy, and environmental health. Public participation results gathered throughout the past decade suggest that the County's water, natural and agricultural resource base is highly valued by residents. This chapter provides summary background information, goals, policies, and key recommendations to preserve and enhance the County's important resources.

This chapter is not intended to replace more detailed planning efforts and documents covering the County's natural and water resources, such as the 2019 *Scott County Water Resources Plan* and the 2019 – 2026 *Scott Watershed Management Organization (SWMO) Comprehensive Water Resources Management Plan*. These recently updated and detailed planning efforts and documents, and subsequent updates, are incorporated into this 2040 Plan by reference.

The County's 2019 *Water Resources Plan*, which meets all of the requirements set in Minnesota statutes, has been reviewed by the Metropolitan Council and approved or adopted by all of the Watershed Organizations in the plan area. It is incorporated into this 2040 Plan as Appendix B. The following is an executive summary of the County's *Water Resources Plan*:

COUNTY WATER RESOURCES PLAN – EXECUTIVE SUMMARY

Scott County's Water Resources Plan describes the County's goals, policies and strategies for addressing its water resources management responsibility for the unincorporated areas of the county. The unincorporated area covered by the Water Resources Plan is overwhelmingly located in the Scott WMO. For this reason, the goals, policies and priorities of the *Scott WMO 2019 – 2026 Comprehensive Water Resources Management Plan* are adopted as the County Water Resources Plan supplemented by:

- Strategies that follow the framework used by the SWMO, but are modified to better fit the roles and functions of a county.
- Sections that acknowledge the issues and local water plan expectations of each of the other WMOs (i.e., the Lower Minnesota River Watershed District, the Prior Lake – Spring Lake Watershed District, and the Vermillion River Watershed Joint Powers Organization).
- Implementation and Administration Sections that detail how the County will administer and implement the plan.

The Scott WMO Plan includes seven goals (Figure VIII - 1) that are incorporated in the County Water Plan.

Figure VIII -1. Water Plan Goals

GOALS
Goal 1: Wetland Management. To protect and enhance wetland ecosystems and ensure/encourage a measurable net gain of wetland functions and acreage.
Goal 2: Surface Water Quality. To protect and improve surface water quality.
Goal 3: Groundwater Management. To protect groundwater quality and supply.
Goal 4: Flood Management. To protect human life, property, and surface water systems that could be damaged by flood events.
Goal 5: Collective Action. To engage the public in ways that inspires them to be willing partners.
Goal 6: Public Investment. To minimize public expenditures and promote efficiency.
Goal 7: Resiliency. To build a resilient landscape.
Goal 8: Public Drainage. To create and enable a long term vision for county ditches.

The Scott WMO is not a separate unit of government from Scott County, and the County Board serves as the Board for the WMO. The Vermillion River Watershed Joint Powers Organization (VRWJPO) operates under a joint powers agreement with Dakota County dated September 5, 2002. Under this agreement Dakota County appoints two Commissioners to the Joint Powers Board and Scott County one Commissioner. All five members of the Prior Lake – Spring Lake Watershed District (PLSLWD) Board are appointed by the County Board. One of the five Managers of the Lower Minnesota River Watershed District (LMRWD) Board is appointed by the Scott County Board.

In addition to the Joint Powers agreement with Dakota County, Scott County also has an annual contract with the Scott Soil and Water Conservation District (Scott SWCD) to provide water and natural resources related services, and has a Memorandum of Understanding with the PLSLWD for local water planning and regulation dated January 24, 2008. The Memorandum of Understanding between Scott County and the Prior Lake – Spring Lake Watershed District has expired and needs to be updated. It expired in 2013, when the District amended its Water Resources Management Plan.

Future amendments of the County Plan will follow the process in MN Rule 8410, as well as that in each of the current WMO plans.

For a complete description and inventory of the County's land and water resource base, including geology, topography, groundwater, soils, surface water, watersheds, wetlands,

floodplains, vegetation, habitat, climate, and environmentally sensitive areas, see the 2019 *Water Resources Plan,* (Appendix B).

RESOURCE INVENTORY

Understanding Scott County's water and natural resource base provides a framework for analysis and suggests possible locational advantages for particular land uses. It is also essential to understand the location of environmentally sensitive areas to make responsible land use-, transportation-, and utility-related decisions. This will prevent severe developmental and environmental problems that may be difficult and costly to correct in the future. Maintenance of sensitive natural features is also important for the visual attractiveness of the county and for the functions they perform as natural communities.

A. Water Resource Management

The Twin Cities Metropolitan Area is mandated by state statute to be covered by Watershed Management Organizations (WMOs) for the purpose of enabling local water management. There are three types of WMOs: a Watershed District, a municipal/city based joint powers WMO, or a county based WMO. Scott County has Watershed Districts and County based WMOs. They are all similar government units that work with local governments, like cities, to satisfy state surface water planning standards. They also help local governments to sort out surface water issues. However, they do not replace state or federal water management authorities. Map VIII–2 shows the jurisdictional boundaries of the four watershed management organizations in Scott County overlaid with the unincorporated areas of the County. Figure VIII-3 shows the amount of unincorporated area located in each WMO.

This Plan and the County Water Resources Plan apply only to the unincorporated areas. As shown in this figure, roughly 84% of the unincorporated area is in the Scott WMO with each of the other WMOs having less than 10% and LMRWD compiling only about 1.5%. For this reason, the Scott WMO Comprehensive Water Resources Management Plan is adopted by reference as the County Water Resources Plan supplemented by a section that acknowledges the issues and local water plan expectations of each of the other WMOs.

Map VIII – 2

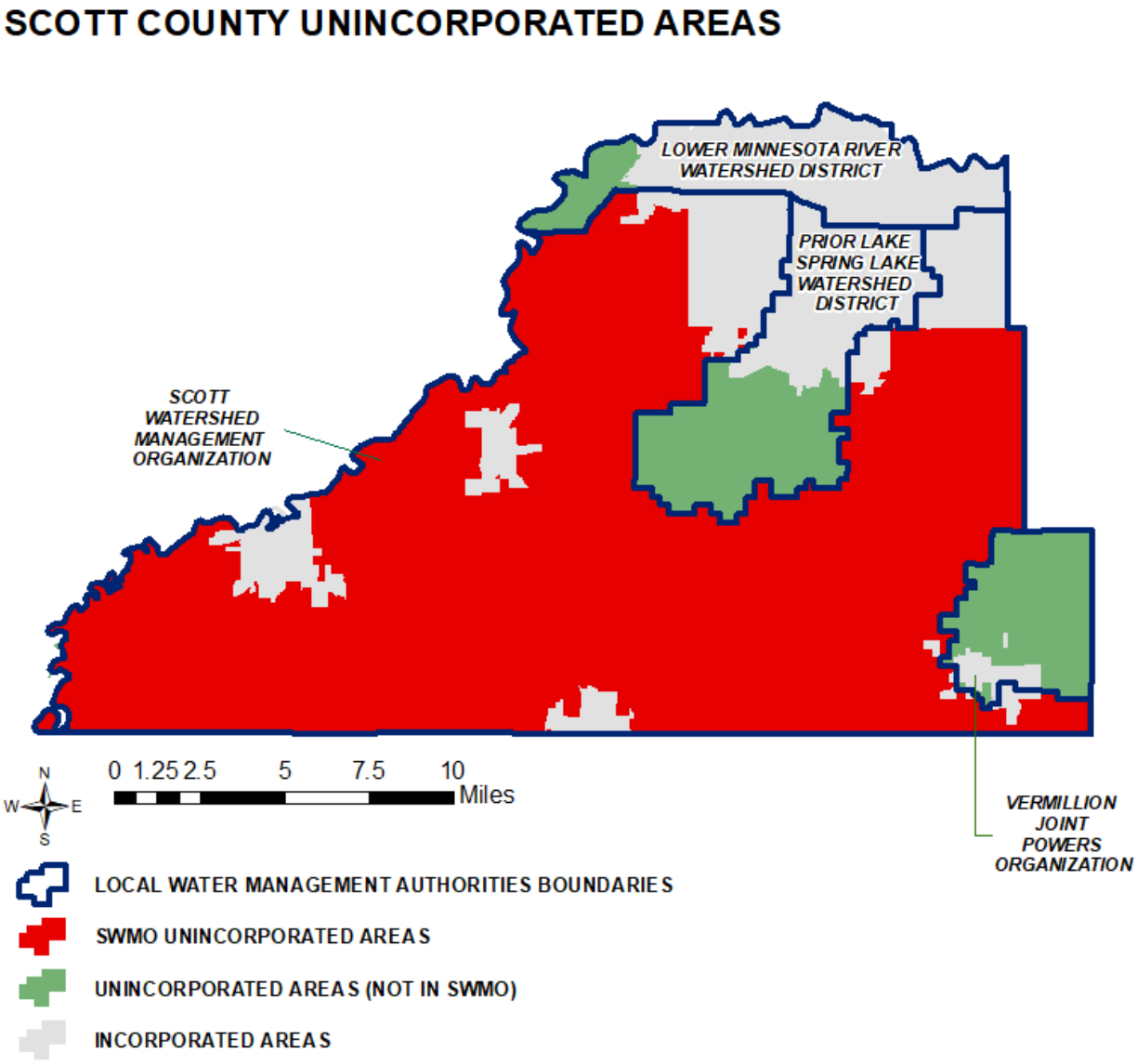

SCOTT COUNTY UNINCORPORATED AREAS
LOWER MINNESOTA RIVER WATERSHED DISTRICT
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
SCOTT WATERSHED MANAGEMENT ORGANIZATION
VERMILLION JOINT POWERS ORGANIZATION
N
W
E
S
0 1.25 2.5 5 7.5 10
Miles
LOCAL WATER MANAGEMENT AUTHORITIES BOUNDARIES
SWMO UNINCORPORATED AREAS
UNINCORPORATED AREAS (NOT IN SWMO)
INCORPORATED AREAS

Figure VIII-3 Incorporated vs Unincorporated Areas of the Watershed Jurisdictions

Government	SWMO**	PLSLWD	VRWJPO	LMRWD	Totals**
Unincorporated Areas (Acres)	142,759.4	13,237.2	10,449.0	2,783.3	169,229
Incorporated Areas (Acres)	38,611	11,561.8	1,345.3	15,328.2	66,846
Total Acres	181,370.7	24,799.0	11,794.3	18,111.6	236,075.6
** Acres were calculated based upon GIS shapefiles, not surveyed.* *** Numbers were adjusted to include the Credit River Township in the incorporated areas.*					
% Unincorporated area**	84%	7.8%	6.2%	1.6%	

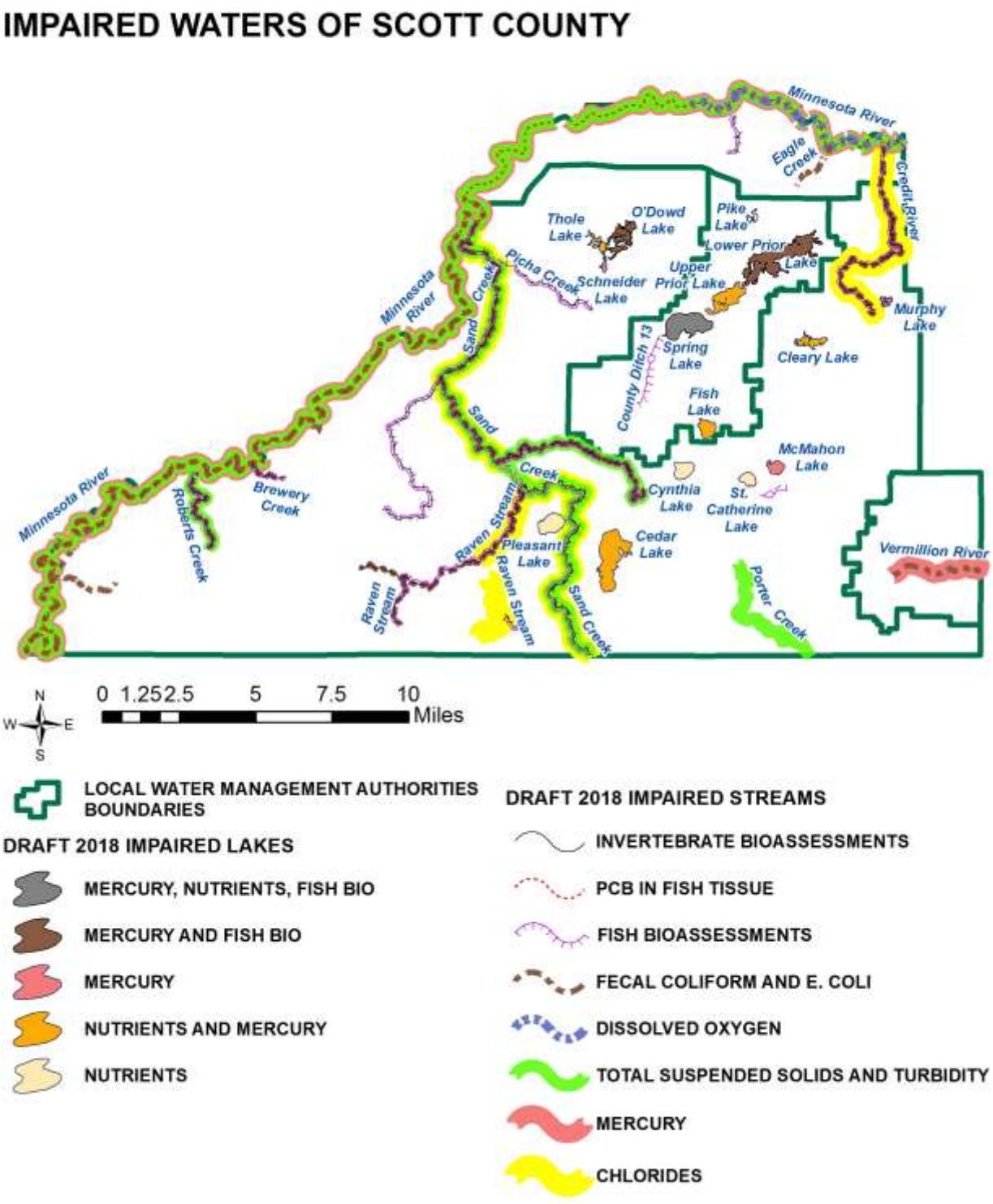
Map VIII–4 shows impaired lakes, rivers and streams in Scott County according to 2018 listing by the Minnesota Pollution Control Agency. A body of water is considered "impaired" if it fails to meet one or more water quality standards. Minnesota water quality standards protect lakes, rivers, streams, and wetlands by defining how much of a pollutant such as bacteria or nutrients can be in water before it is no longer drinkable, swimmable, fishable, or useable in other, designated ways (called "beneficial uses"). Waters that do not meet their designated uses because of water quality standard violations are impaired. Monitoring suggests that about 40% of Minnesota's lakes and streams are impaired, which is comparable to impairment rates in other states.

The Metropolitan Council performs a variety of specific roles in the management of the region's water resources, in partnership with watershed management organizations, local units of government, state and federal agencies, and other partners. Given that there are 950 lakes in the Twin Cities metro area, the Council developed a Priority Lakes List in 2003 to focus its limited resources toward managing the sustainability of the region's lakes. The lakes on the Priority Lakes List (Scott County Priority Lakes are shown on Map VIII–4) were chosen if they met at least one of the following criteria:

- **High regional recreational value**, the surface area of the lake must be at least 100 acres, has a public boat access, and is adjacent to a park.
- **Water supply lake**
- **Good water quality**, if the annual summer trophic status indicators are relatively low
- **Special significance for wildlife habitat**

In 2014, state legislation was passed that provides funds to counties for AIS prevention. Biannually the county receives funding for activities such as education, lake monitoring, and boat ramp inspections detailed in the Scott County Aquatic Invasive Species Prevention Plan (AIS Plan). The AIS Plan is also incorporated into the County Water Resources Plan by reference and the county will work with other partners to implement the AIS Prevention Plan.

Map VIII – 4


IMPAIRED WATERS OF SCOTT COUNTY
Minnesota River
Eagle Creek
Credit River
Thole Lake
O'Dowd Lake
Pike Lake
Lower Prior Lake
Upper Prior Lake
Picha Creek
Schneider Lake
Sand Creek
Minnesota River
Murphy Lake
Spring Lake
Cleary Lake
County Ditch 13
Fish Lake
Sand Creek
McMahon Lake
Cynthia Lake
St. Catherine Lake
Minnesota River
Roberts Creek
Brewery Creek
Raven Stream
Pleasant Lake
Cedar Lake
Vermillion River
Raven Stream
Raven Stream
Sand Creek
Porter Creek
N
W
E
S
0 1.252.5 5 7.5 10
Miles
LOCAL WATER MANAGEMENT AUTHORITIES BOUNDARIES
DRAFT 2018 IMPAIRED LAKES
MERCURY, NUTRIENTS, FISH BIO
MERCURY AND FISH BIO
MERCURY
NUTRIENTS AND MERCURY
NUTRIENTS
DRAFT 2018 IMPAIRED STREAMS
INVERTEBRATE BIOASSESSMENTS
PCB IN FISH TISSUE
FISH BIOASSESSMENTS
FECAL COLIFORM AND E. COLI
DISSOLVED OXYGEN
TOTAL SUSPENDED SOLIDS AND TURBIDITY
MERCURY
CHLORIDES

B. Groundwater/Drinking Water Supply

Map VII-5 shows the location of groundwater level monitoring wells in the county based on data from the Minnesota Department of Natural Resources. Scott SWCD monitors 13 MDNR observation wells within the county, plus several wells within the Savage Fen and surrounding area. Water level trends in general are stable or are increasing. The other seven MDNR wells were omitted because they either connect with multiple aquifers or have a short or incomplete data record.

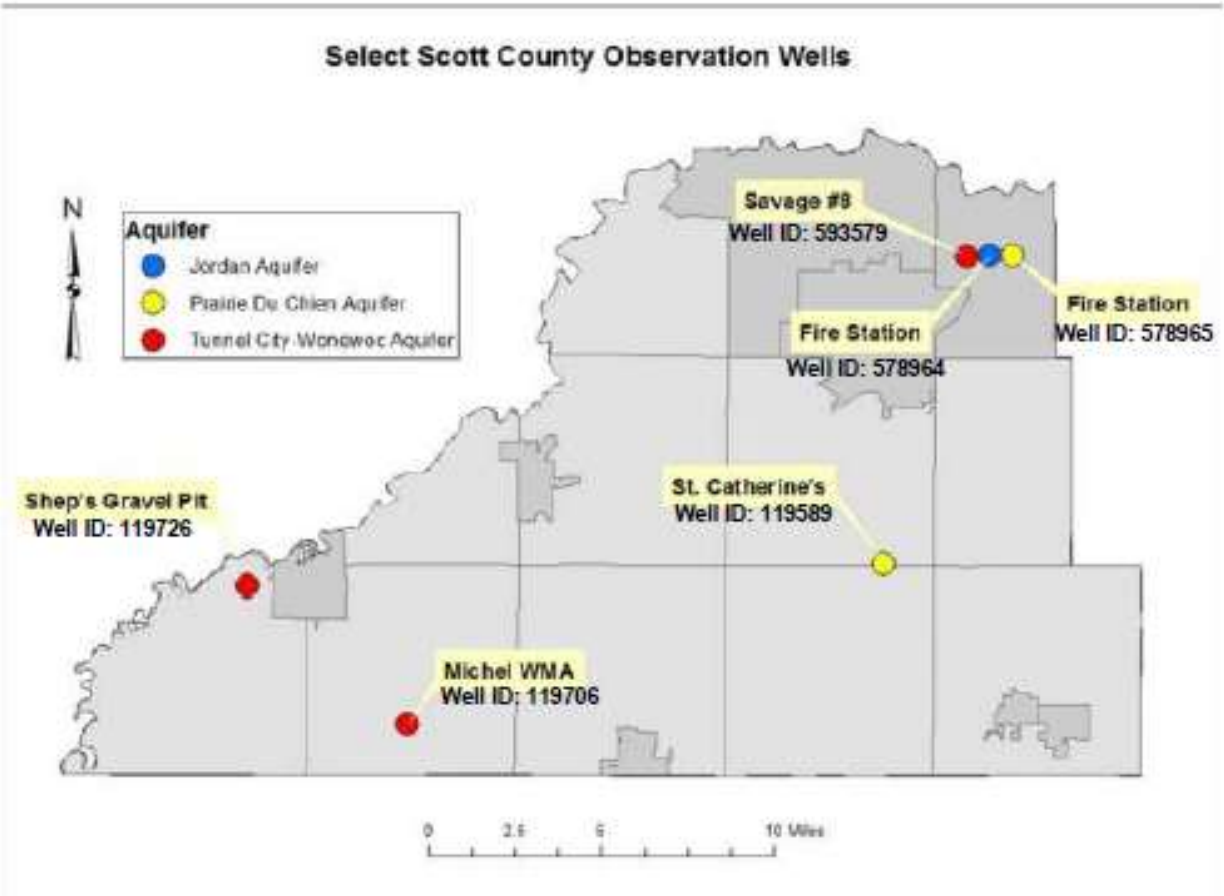
According to the 2014 Minnesota Drinking Water Annual Report, no Scott County community water systems exceeded the 10 mg/L nitrate standard (SWCD, 2016). Nitrates are a common groundwater pollutant and can cause "Blue Baby Syndrome". Shakopee community public water supply systems have tested above 3 mg/L, and they are working with MDH to slow or reverse nitrate pollution in their source water. There was also a recent report of elevated nitrate levels in water at the Brookhaven development southwest of Shakopee (Davy-Sandvold, 2017).

The 2011 SWMO sampling of 67 private wells detected nitrates in some wells, but none exceeding the drinking water standard. Atrazine was not detected in any of the wells. Results from county test kits sold to home owners and analyzed by Minnesota Valley testing laboratory show very few results exceeding the drinking water standard. The average result for nitrates from the test kits is less than 1 mg/L. Only 11 results exceeded the standard in 19 years of testing, representing eight properties. In general, staff observations at the county are that the small number of wells with elevated nitrates are found in areas where the groundwater is moderately to highly susceptible to contamination (Map VIII–6) (Scott County, 2017b), and where the wells are in a shallow aquifer. Most of these wells are in the Minnesota River Valley (i.e., below or along the toe of the bluff). There also is a cluster along the western border of the City of Savage and Credit River Township where there is a 100 foot or so layer of sand/gravel beginning at or just below the surface.

Map VIII–6 Surface Infiltration map, categorizes the length of time water takes to penetrate the unsaturated zone and reach groundwater. These estimates are generated from infiltration rates and hydrologic groupings and soil texture. The infiltration rate, or time it takes water to move from the surface to the aquifer, is a proxy for groundwater contaminant susceptibility. This map was taken from the Scott County Geologic Atlas.

Map VIII-7 shows drinking water supply management areas within or near municipalities and areas deemed low to highly vulnerable drinking water supply management areas in the county based on data from the Minnesota Department of Health.

Map VIII – 5


Select Scott County Observation Wells
N
Aquifer
Jordan Aquifer
Prairie Du Chien Aquifer
Tunnel City-Wonewoc Aquifer
Savage #8
Well ID: 593579
Fire Station
Well ID: 578965
Fire Station
Well ID: 578964
St. Catherine's
Well ID: 119589
Shep's Gravel Pit
Well ID: 119726
Michel WMA
Well ID: 119706
0
2.5
5
10 Miles

Map VIII–6: Surface Infiltration

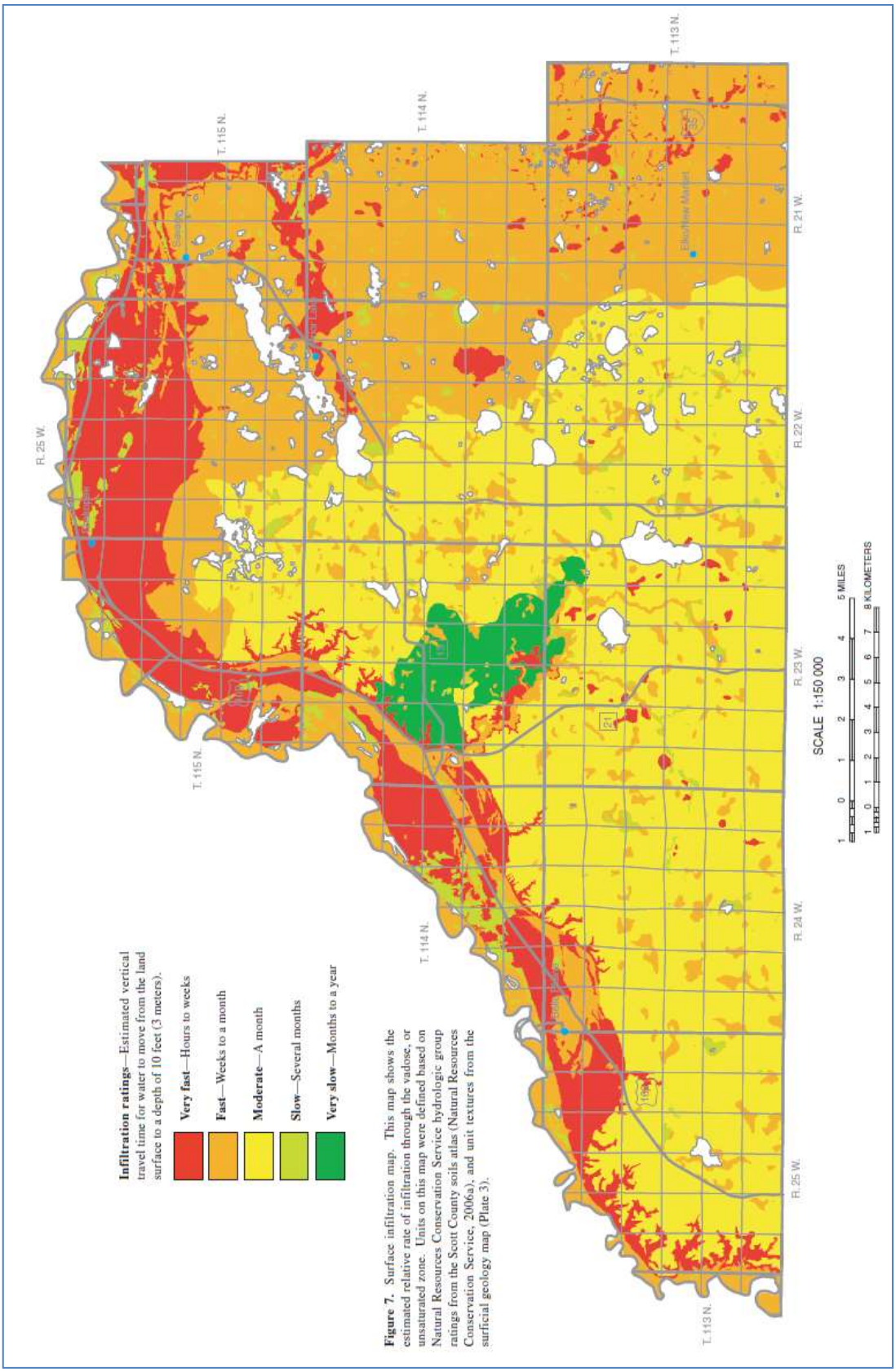
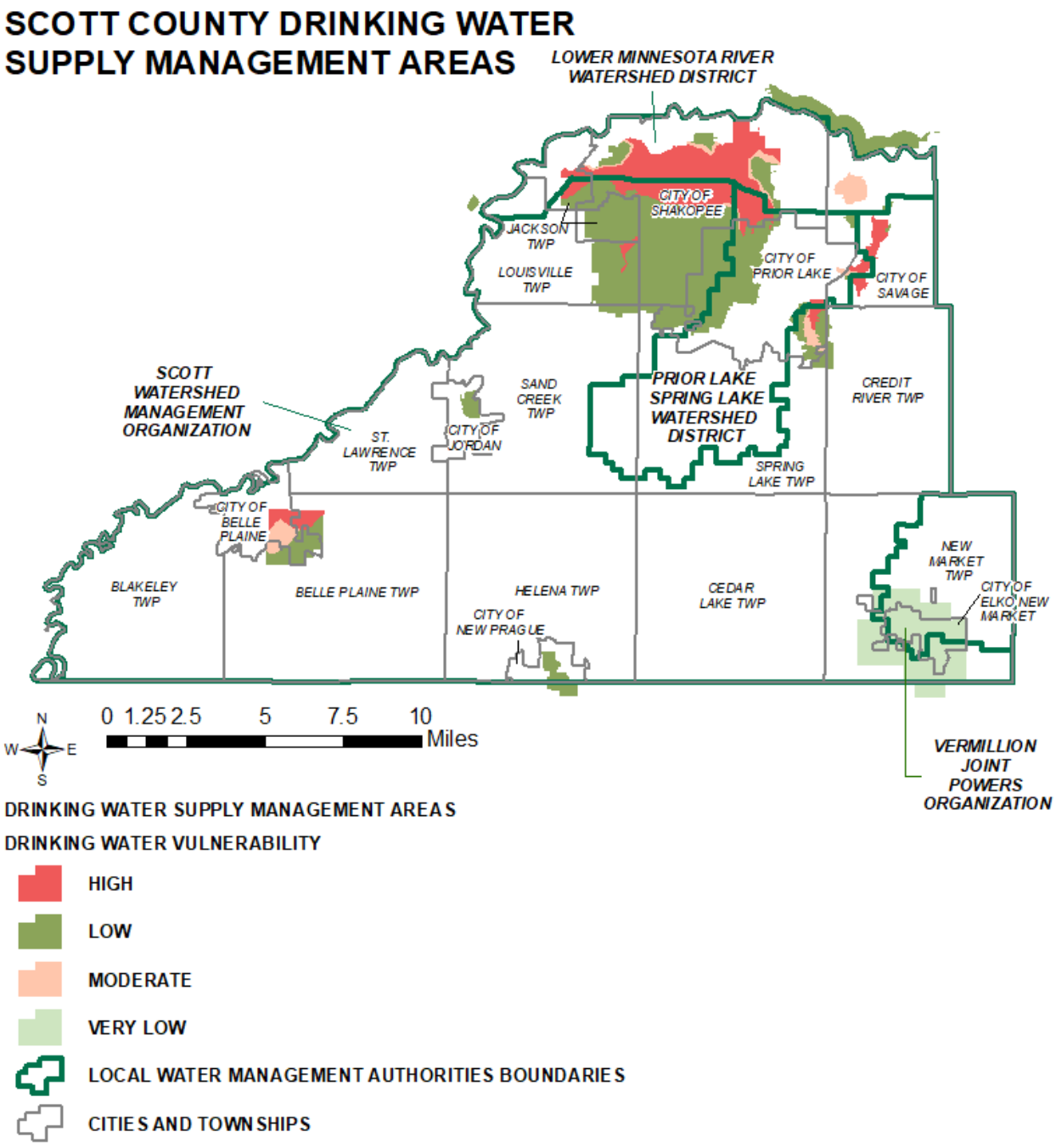


Figure 7. Surface infiltration map. This map shows the estimated relative rate of infiltration through the vadose, or unsaturated zone. Units on this map were defined based on Natural Resources Conservation Service hydrologic group ratings from the Scott County soils atlas (Natural Resources Conservation Service, 2006a), and unit textures from the surficial geology map (Plate 3).

Map VIII–7:


SCOTT COUNTY DRINKING WATER SUPPLY MANAGEMENT AREAS
LOWER MINNESOTA RIVER WATERSHED DISTRICT
CITY OF SHAKOPEE
JACKSON TWP
LOUISVILLE TWP
CITY OF PRIOR LAKE
CITY OF SAVAGE
SCOTT WATERSHED MANAGEMENT ORGANIZATION
SAND CREEK TWP
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
CREDIT RIVER TWP
ST. LAWRENCE TWP
CITY OF JORDAN
SPRING LAKE TWP
CITY OF BELLE PLAINE
NEW MARKET TWP
CITY OF ELKO NEW MARKET
BLAKELEY TWP
BELLE PLAINE TWP
HELENA TWP
CEDAR LAKE TWP
CITY OF NEW PRAGUE
N
W
E
S
0 1.25 2.5 5 7.5 10
Miles
VERMILLION JOINT POWERS ORGANIZATION
DRINKING WATER SUPPLY MANAGEMENT AREAS
DRINKING WATER VULNERABILITY
HIGH
LOW
MODERATE
VERY LOW
LOCAL WATER MANAGEMENT AUTHORITIES BOUNDARIES
CITIES AND TOWNSHIPS

C. Land Cover

The County completed the Minnesota Land Cover Classification System (MLCCS) inventory in the 2000s. For much of the County the MLCCS included quality rankings for the natural community cover types. The MLCCS is in GIS format and is available on the County website. The MLCCS and the data from the DNR Natural Heritage database formed the bulk of the information used to develop the Natural Areas Corridors Map (Map VIII-10). County staff reviewed sections of townships throughout the county in 2017 in GIS comparing with aerial photos from 2017 and concluded that land cover has not changed greatly since the MLCCS inventory was done, and this remains reasonably accurate.

D. Geology

Scott County is dominated by glacial till, except along the Minnesota River, which is composed of alluvium and terrace deposits. There are also areas near the river where the bedrock is at or near the surface. The abundance of glacial till, a material with low permeability because of the silts and clays that fill in the spaces between larger grains, provides a layer of protection for the county's aquifers that lie in the sedimentary rock below except near the river where bedrock is near the surface. Groundwater is susceptible to contamination in these areas. This is important as all Scott County drinking water comes from groundwater supplies. Additional geologic information can be obtained from the *Geologic Atlas of Scott County, Minnesota* (Minnesota Geological Survey, 2006) available on the County website.

E. Bluffs

Centuries of erosive actions by the Minnesota River and its tributaries have left unique bluff features across areas of Scott County, most notably in Blakely Township. Bluff areas offer unique views and contain the majority of the natural communities and rare species identified by Minnesota Department of Natural Resources (DNR) natural resource inventories. Bluff features present many challenges for stormwater management and erosion control as the areas around them become developed. It is important that these areas are managed appropriately to preserve the unique features including the natural communities and rare species. In addition, incorporating the preservation of bluffs into development provides aesthetic views while maintaining the area's unique history and sense of place.

The erosion and instability of bluff areas are of concern within the unincorporated areas, and as a result requirements are in place to facilitate management of these areas. Standards for land disturbing activities in bluff areas are identified in the *2019 Water Resources Plan, Scott WMO Comprehensive Water Resource Plan*, and the County's Zoning Ordinance. Standards include a defined bluff overlay zone and bluff impact zone, runoff management, and setbacks for structures, stormwater ponds, infiltration systems, soil saturation-type features, and ISTS. These standards help facilitate stability of the bluff areas within the county, thereby reducing

erosion/sedimentation and reduce future costs to provide clean-up of areas, culverts, and bridges where deposition takes place.

F. Aggregate Deposits

Map VIII–8 shows a map of bedrock and sand and gravel deposits in Scott County. The following text from the Minnesota Geological Survey *Aggregate Resources of the Seven-County Metropolitan Area* study (1999) briefly describes Scott County's aggregate deposits. The entire study is available for review on the Minnesota Department of Natural Resources (DNR) website.

Sand and Gravel: Most of the sand and gravel resources of Scott County lie within the broad terraces of the Minnesota River valley, along the northwest county boundary. Less voluminous deposits of ice-contact sands and gravels extend from the Minnesota River valley southeast into the interior of Scott County.

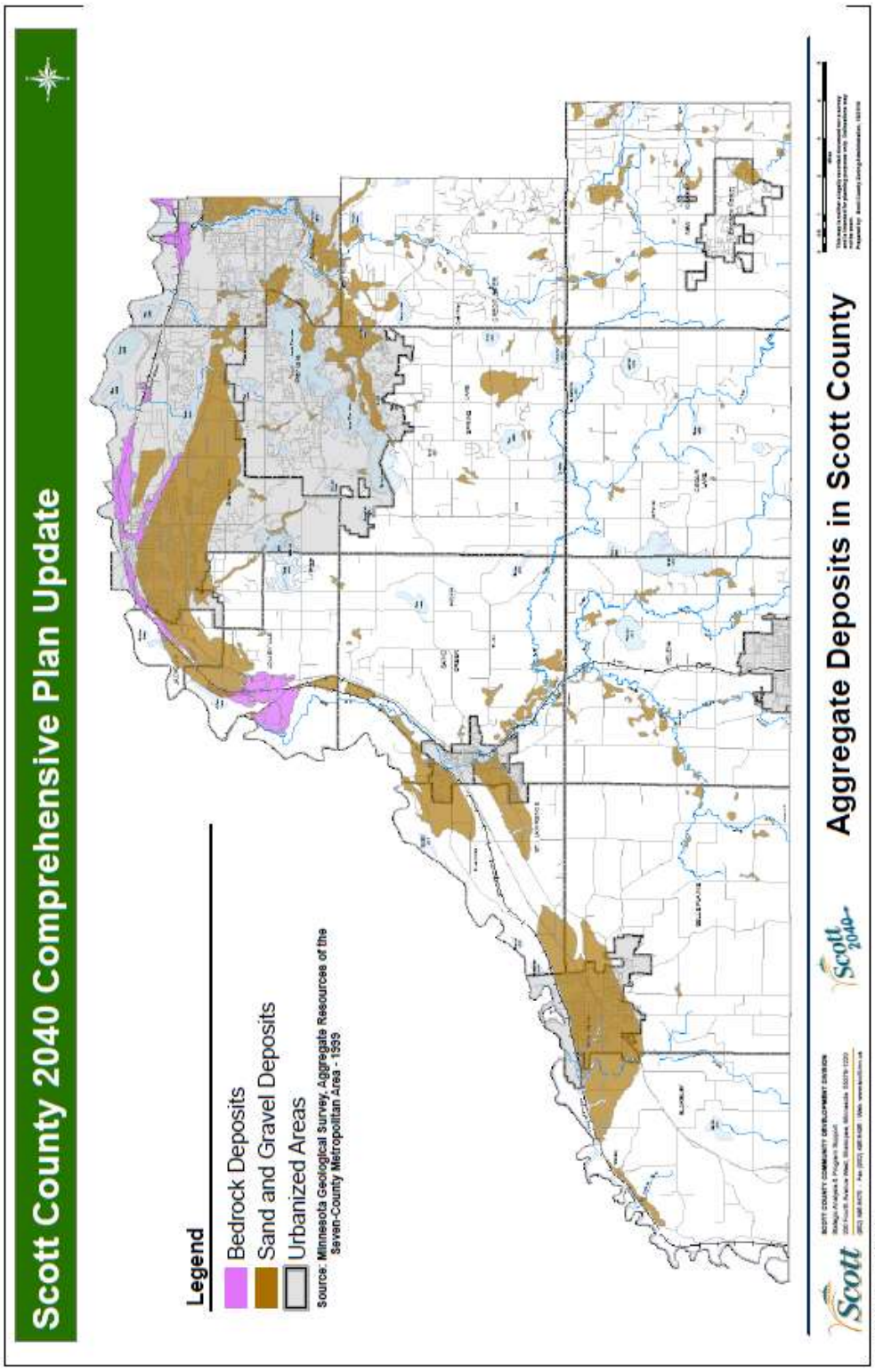
Bedrock: Prairie du Chien dolostone is close to the present land surface along the Minnesota River terrace in the northern part of Scott County. Along much of this terrace, bedrock is covered by 20-30-foot thick deposits of sand and gravel. Therefore, more bedrock resources might become available if the sand and gravel were removed. Much of the area is urbanized. Bedrock aggregate resources in Scott County can be divided into the three sub regions:

Scott northwest - Prairie du Chien dolostone underlies the Minnesota River terrace in northwestern Scott County. In this sub region, the dolostone is comparatively thin (50 to 85 feet), and is underlain at shallow depths by the Jordan Sandstone. Several large quarries have operated or are currently operating in the Prairie du Chien in this sub region, and much of the resource is already mined.

Scott north-central - Prairie du Chien dolostone underlies the terrace south of the Minnesota River and ranges from 70 to 90 feet thick. Most of the area has not been quarried because it is an area of urban development (Shakopee). There are, however, active or former quarries in the less developed areas at either end of the sub region.

Scott northeast - Prairie du Chien bedrock in this sub region in northeastern Scott County also underlies a terrace of the Minnesota River. Most of the remaining resource is present at the margins of two quarries that have been stripped free of overburden. The overburden was apparently thicker than 10 feet over most of the area prior to mining. These quarries are being encroached upon by urban development.

Map VIII- 8 Aggregate Deposits



NATURAL AREA CORRIDORS

Identifying opportunities for linear connections of natural features is a subject that has evolved in Scott County plans over the years. The County's interim *Parks, Trails and Open Space System Policy Plan* (2004) recommended how the various federal, state, regional, and local agencies could work together to provide parkways, linear parks, and greenway corridors. In 2005, the *Southeast Scott County Comprehensive Plan Update* took the subject further by establishing mapping criteria, goals, policies, and possible implementation tools to achieve these linear natural resource corridors. A map showing natural resource corridors in the southeastern portion of the county was included in the 2005 plan.

The 2030 Plan built upon these previous planning efforts and is bolstered by an extensive public participation process that identified a growing interest in a comprehensive approach to preserving natural areas. In 2005, a public opinion survey conducted in conjunction with the 2030 planning process found that about three-quarters of respondents supported or strongly supported additional regulations to protect environmentally sensitive areas. Facing mounting growth and development, these survey respondents indicated that protecting the county's woodlands, wetlands, habitat areas, and ground water were priority environmental issues to address in the County's long-range plans.

In 2006, the County held an extensive visioning process which included seven forums held across the county. Participants responded to a series of questions, and when asked whether the County should work now to preserve open space, in light of rising land costs and development pressures, almost three-quarters of participants agreed, and half strongly agreed. These forums also confirmed that water quality protection was one of the most critical issues (behind traffic) facing the County over the next two decades. As a result of this public input, the 2040 Vision sees a future when the County's "developed landscape includes parks, greenways, and conservation corridors based on natural resource inventories."

A. County Defined Natural Area Corridors

In response to public input, a process began in late 2006 to undertake the natural resource inventory and to ultimately identify Natural Area Corridors. This process included technical analysis and research conducted by County staff, as well as policy input from three advisory commissions (Parks, Planning, and Scott WMO Watershed), the Scott Soil and Water Conservation District Board, and township officials. This group held six workshops over the course of 2006 and 2007 to compile inventory data, identify draft corridors, and discuss various implementation policies.

Under this 2040 Plan, a Natural Area Corridor is defined as a linear connection of natural features as indicated on Map VIII – 10, which may include: areas with known sensitive species or communities, unique natural communities, and high and medium quality natural communities. Designating Natural Area Corridors is not intended to prohibit development. Rather, the intent is to guide development-related decisions as outlined within in the following corridor purpose statements, and involves a combination of efforts to protect high priority natural areas under private ownership as well as public ownership in combination with parks planning:

- Guide where resources can be enhanced and/or restored (e.g. types of vegetation to be planted, where stormwater ponds should be located);
- Allow for movement of wildlife in order to meet their basic habitat requirements for feeding, breeding, and resting;
- Provide connectivity between larger preservation areas;
- Guide where trailways (e.g. bituminous, woodchip, & vegetative paths) may be located and compatible–decision is necessary as to whether use will be consistent/suitable for natural resource protection–mitigation efforts may be required;
- Create viewsheds to help maintain rural "feel" of the community and the landscape that attracts many residents to the area;
- Buffer a resource from the impact of development;
- Guide where high priority areas may be targeted for public acquisition and regional or local parks;
- Guide transportation corridor planning; and
- Protect and buffer water resources.

When a property within a mapped Natural Area Corridor is proposed for development, the County must evaluate the proposal alongside the following statements and make decisions related to implementing corridor purposes to shape the pattern of development desired:

- Determine if the property (or a portion of the property) proposed for development is within or adjacent to a Natural Area Corridor;
- Identify what types of resources are present within the corridor (e.g. wetland, woodland);
- Identify the purpose of the corridor (as outlined above);
- Determine whether preservation of the resource(s) within the corridor is appropriate;
- Determine what levels of resource protection already exist for the area in question (for example: if the area is a wetland in a corridor, then there is already some existing protection through the State of Minnesota Wetland Conservation Act).

Through a private land development in New Market Township, the County and Township preserved 30 acres of the Natural Area Corridor on the south side of Goose Lake in 2016 (the mapped corridor is shown in green on the aerial map above). The preserved open space could eventually become a town park site.

B. Implementation

Implementation will vary depending on the specific resources present and the choices of the local government unit. Examples of five possible implementation tools may include:

1. Guide development (e.g. re-configure lots or road alignment or shift area of density to less significant area) such that the area is not impacted or impact is limited to the resources present (see Chapter V for more discussion on this possible implementation tool).

2. Provide incentives such as:
   - Allow higher density in an area for clustering development away from the resource and protecting the resource through conservation easements, land dedication, or other means (see Chapter V for more discussion on this tool);
   - Transfer of development rights: transferring (selling) density opportunities for development in areas where there is less of an impact on natural resources (see Chapter V for more discussion on this tool); and/or
   - Set aside (Reinvest in Minnesota–RIM/Conservation Reserve Enhancement Program–CREP) type programs.

3. Developer dedicated conservation easements.

4. Acquisition by local government (e.g. park dedication vs. fee per lot, public easements).

5. Acquisition by conservation organizations for recreational and/or preservation purposes (may be outright acquisition or easements).

6. The construction of publicly owned, operated, and maintained regional stormwater ponds shall be encouraged, where feasible, to promote storage through the construction of an integrated regional retention area, as opposed to multiple smaller areas of on-site ponding, to reduce public long-term maintenance and efficiency.

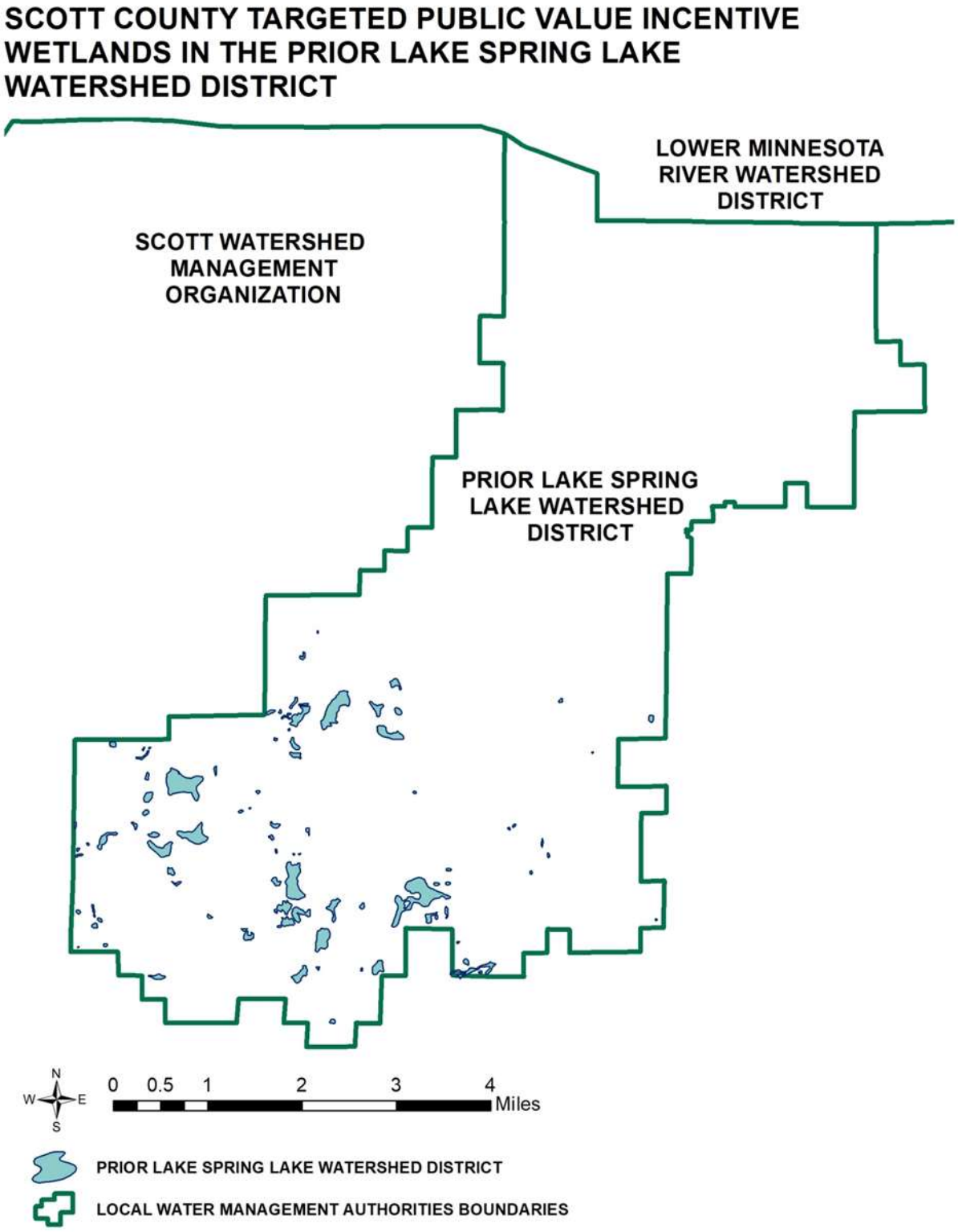
In addition to the development and acquisition strategies above, the SWMO adopted goals and strategies to improve riparian corridors and improve buffering adjacent to water resources. Since 2006, these efforts have resulted in 194 filter strips, 475 acres of native grasses, six riparian buffers, 23 shoreland stabilization and restoration type practices completed. The SWMO's new Plan continues these efforts. The other WMOs have similar efforts, and the PLSLWD has prioritized specific drained wetland restoration locations (Map VIII–9) if willing landowners can be found.

Protecting and preserving wetlands fared better than restoring them under the previous Plan. Kloiber and Norris (2017) found a small net gain of wetland acreage statewide from 2006 to 2014. There is not an estimate for just the unincorporated area of the County. However, experience from local development reviews and permitting is consistent with the findings of Kloiber and Norris. Estimates for Scott County are that for non-exempt impacts, the number of acres impacted in Scott County are being offset by a similar volume of acres being mitigated using bank credits within the County. "Exempt" impacts, however, are resulting in a loss of a little over one acre per year (Personal Communication, Troy Kuphal, District Manager, Scott SWCD February 7, 2018). "Exempt" means they do not need to be replaced. This stemming of wetland loss is due in large part to the Wetland Conservation Act (WCA) and efforts by the Scott SWCD and local LGUs responsible for implementing WCA. The County does not serve as the

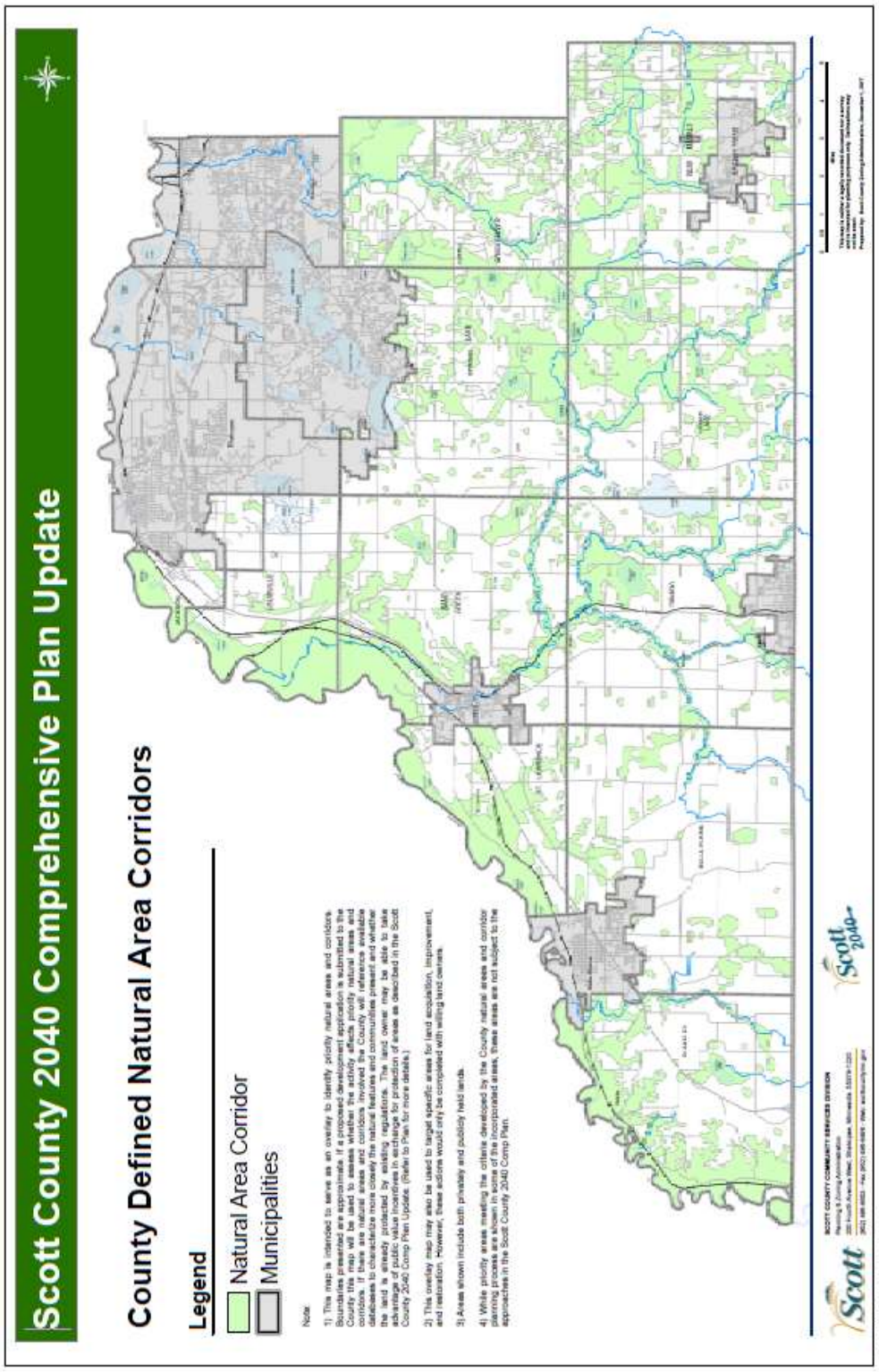
LGU for implementing WCA because other units of government in the county (cities, townships and the Scott SWCD) have accepted responsibility. In addition, all of the local units of government responsible for implementing Local Water Plans completed them with the inclusion of the SWMO standards for protecting wetlands from impacts caused by stormwater runoff. The one acre annual loss is likely being offset by restorations completed by the WMOs.

Map VIII – 18 shows areas identified as having potential for regional storm water management facilities in the Sand Creek, Prior Lake-Spring Lake, and western areas of the county. This map was based on studies completed by the Scott Watershed Management Organization and the Prior Lake- Spring Lake and Vermillion River watersheds.

Map VIII – 9


SCOTT COUNTY TARGETED PUBLIC VALUE INCENTIVE WETLANDS IN THE PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
LOWER MINNESOTA RIVER WATERSHED DISTRICT
SCOTT WATERSHED MANAGEMENT ORGANIZATION
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
N
W
E
S
0 0.5 1 2 3 4
Miles
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
LOCAL WATER MANAGEMENT AUTHORITIES BOUNDARIES

Map VIII- 10 COUNTY DEFINED NATURAL AREA CORRIDORS



AGRICULTURAL RESOURCES

Even with all of the residential growth occurring in the rural portions of Scott County, agriculture remains a vital component of the local economy. Many landowners continue to utilize land for agricultural purposes. Agricultural uses are promoted in nearly all of the land use categories described and mapped in Chapter V (Land Use & Growth Management). A number of agriculturally related businesses, such as dairies, nurseries, wineries, and orchards are found in the township areas. The western townships, particularly Blakeley, Belle Plaine, St. Lawrence, Helena, and Sand Creek, contain the majority of larger-scale farming operations. This is in part due to these townships' long standing history of agriculture and farming activities. The remaining townships also contain a number of farming operations, but have seen a loss of farmland as land values increased and farmers decided to sell their land for other uses.

A. Prime Farmland and Soils of Statewide Significance

Prime farmland, as defined by the U.S. Department of Agriculture (USDA), is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Soils of statewide significance also have strong characteristics for crop production, but are classified by state and local agencies. Map VIII-11 shows prime farmland and soils of statewide significance for the unincorporated areas of Scott County. A large concentration of these soil types is found in the western portion of the county. This is also the area with a strong agricultural history.

B. Farmland and Crop Production

Figure VIII – 12 provides farming-related statistics for Scott County from 1992 to 2017, using data from the U.S. Department of Agriculture (USDA). The total number of farms and the land used in farming decreased over this 25-year time period, but the average farm size in the county remained relatively stable over this time period, from 157 acres in 1992 to 156 acres in 2017. The primary crops were corn, soybeans, and hay, while cattle and hogs were the top livestock inventoried. Other important commodities included milk, poultry, eggs and grains.

Together, agricultural businesses generated $75.6 million for the county's economy in 2017 – down from a high mark of $112.2 million in 2012. The average age of the principal farm operator in the county is 57 years old; half of the operators farm as their principal occupation while the other half rely on a secondary occupation.

MAP VIII – 11
PRIME FARMLAND AND SOILS OF STATEWIDE SIGNIFICANCE

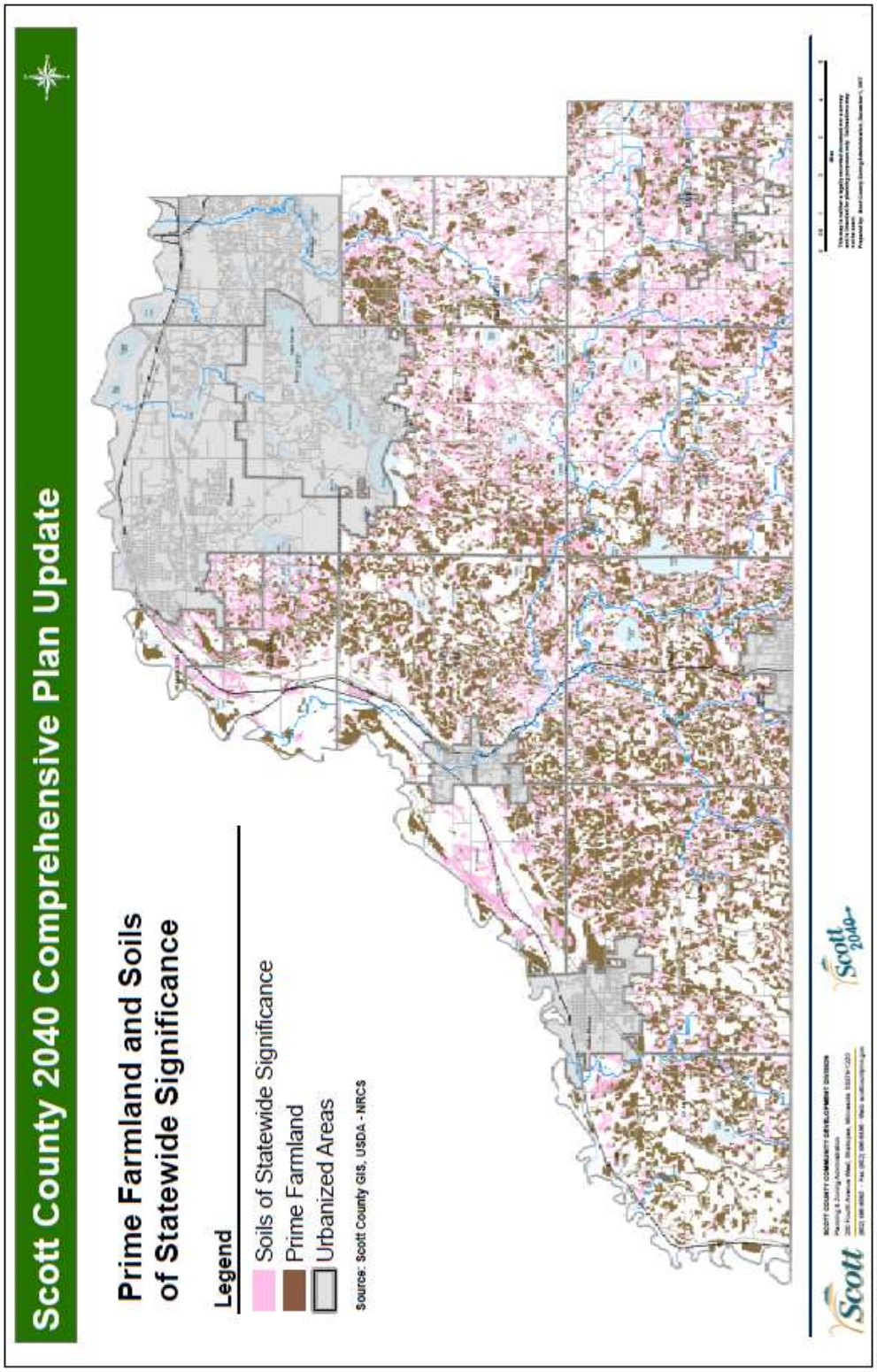


Figure VIII – 12

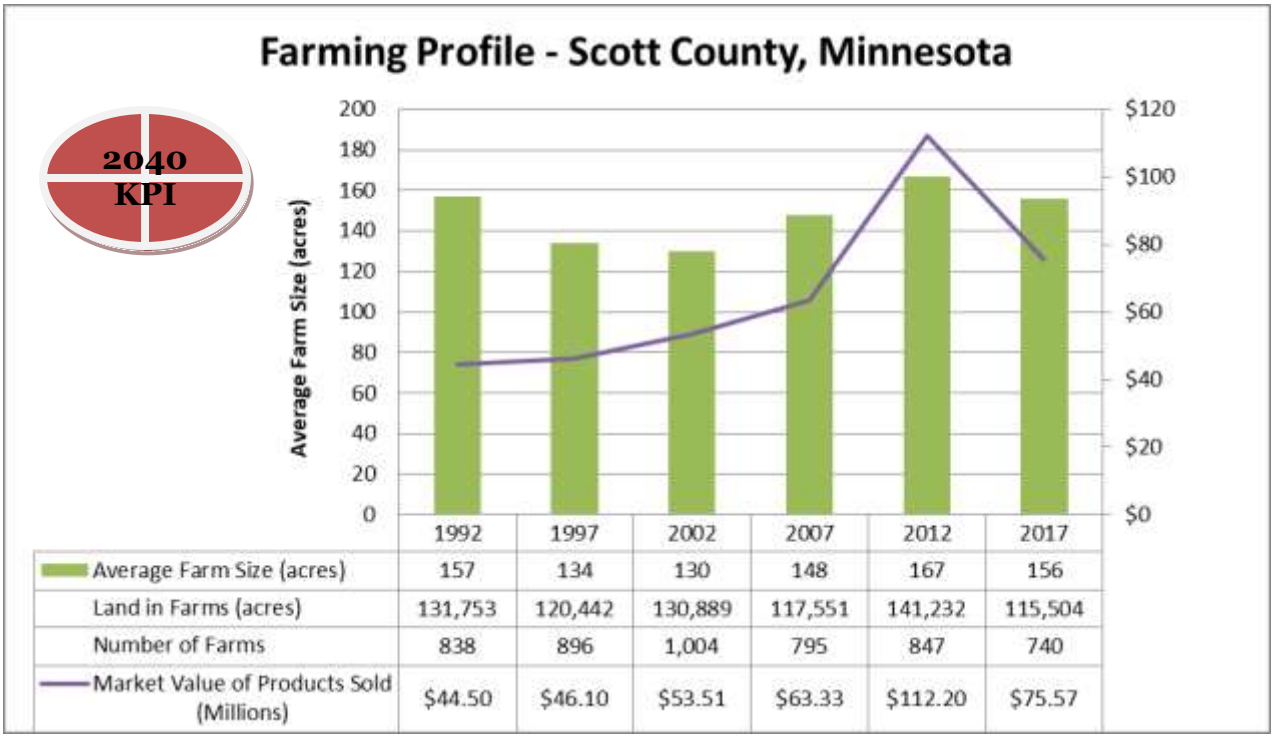


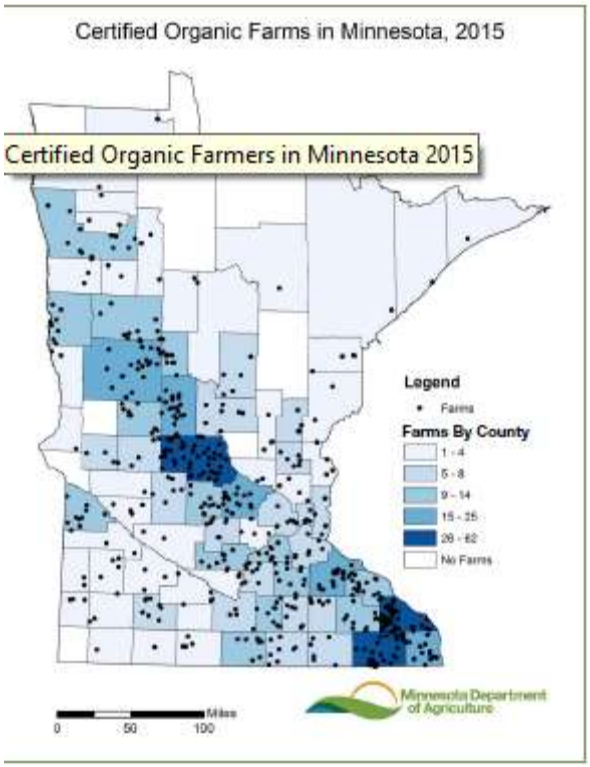
Figure VIII-13 shows the quantity of selected crops and commodities (reported as either total acreage or value of sales) produced in Scott County and how the county ranks with the other 87 counties in the state in production of those commodities. The county's ranking has remained fairly steady from 2002 to 2012 in these select categories, with the notable exception in the drop in sales of nursery, greenhouse and sod products relative to other counties in the state.

Figure VIII – 13
Scott County Notable Crops and Commodities, 2012

Crop or Commodity	Quantify	State Rank – '12	State Rank – '02
Grains, dry beans/peas	$65,460,000	62	58
Corn for grain	47,769 acres	58	53
Soybeans	37,522 acres	59	57
Hay and grass silage	12,744 acres	41	38
Fruits, tree nuts, berries	$1,107,000	4	4
Nursery, greenhouse, sod	$1,311,000	23	8
Milk from cows	$18,494,000	27	24

Source: United States Department of Agriculture (USDA) Agricultural Statistics Service

C. Organic Farming



Organic farming is a growing trend in agriculture production in Minnesota and across the nation. It uses natural-based farming practices that exclude the use of synthetic fertilizers and pesticides, livestock feed additives, and genetically modified organisms. As much as possible, organic farmers rely on crop rotation, organic manure management, crop residue, compost, and mechanical cultivation to maintain soil productivity and control pests. Organic farming practices are being used in the production of crops, meat, and dairy products and have been promoted as a way to provide a healthy, sustainable local food source.

According to the Minnesota Department of Agriculture, the number of certified organic farms in the state grew by 13% between 2011 and 2015 to an estimated 627. Nationwide, the number of organic farms grew by nearly 22% during this time period. The distribution and concentration of certified organic farms typically mirror their non-organic counterparts (see map above). Generally, there tends to be more organic dairies in the state's "dairy belt" of Sterns and neighboring counties in central Minnesota, as well as in the southeastern part of the state. Organic farms specializing in grains and oilseeds are found in the Red River valley. Near the Twin Cities – where land prices are higher – there tends to be more organic fruit and vegetable farms.

At a more local level, Figure VIII–14 lists the number of certified organic farms in Scott County and neighboring counties, as of 2017. It should be noted that there may be a number of organic or natural food farms in Scott County and neighboring that have not received USDA certification or are in the process of transitioning to organic (a process that takes three years for crop production).

Figure VIII – 14
USDA Certified Organic Farms
in Scott and Surrounding Counties

County	Number of Farms (Total Acreage)
Scott	**5 (718)**
Carver	1 (62)
Dakota	3 (452)
Hennepin	1 (86)
Le Sueur	2 (350)
Rice	7 (1,720)
Sibley	2 (490)

Source: Minnesota Dept. of Ag., Organic Farm Directory, 2017

Farmland Protection Toolbox

The American Farmland Trust advocates many approaches to supporting agriculture. Scott County has adopted or promoted the approaches checked below from the ATF's farmland preservation toolbox.

- ☐ Permanent Conservation Easements
- ☑ Agricultural Preservation Zoning
- ☑ Cluster Zoning
- ☑ Comprehensive Planning
- ☐ Purchase of Conservation Easements (PACE)
- ☑ Right-To-Farm Laws
- ☑ Agricultural Districts/Differential Assessment
- ☑ Transfer of Development Rights (TDR)
- ☐ Urban Growth Boundaries (UGB)

According to the Minnesota Department of Agriculture's 2015 status report of organic agriculture in the state, consumer demand for organic food has grown strong in recent years due to several factors, including changing consumer attitudes about food and health, concerns about food safety, increasing availability of organic products, improvements in taste and quality, more competitive pricing for consumers, and the ability of organic and natural companies to secure investment capital. Due to this growing consumer demand, organic farming is increasingly being seen as a way to promote rural economic development and support the local economy.

A 2001 study by the Minneapolis-based Crossroads Resource Center entitled "Finding Food in Farm Country" found that the regional economy in southeastern Minnesota loses $400 million to outside sources annually through traditional farming production practices. In addition, $500 million leaves the economy through consumer purchases of non-local food products. That results in $900 million annually that could remain in the local economy through the production and purchasing of a local food supply. While similar studies have not been completed for Scott County or other metropolitan counties, a number of other Midwestern regions have been studied showing comparable results.

In addition to guiding areas for larger scale agricultural uses, Chapter V also promotes "small-parcel farms for local food production" as an appropriate use in the Agricultural Preservation Area, Urban Expansion Area, Transition Area, and Rural Residential Reserve Area land use categories. This 2040 Plan promotes these smaller scale farming operations to help provide a local food source for nearby communities and to help enrich the local economy.

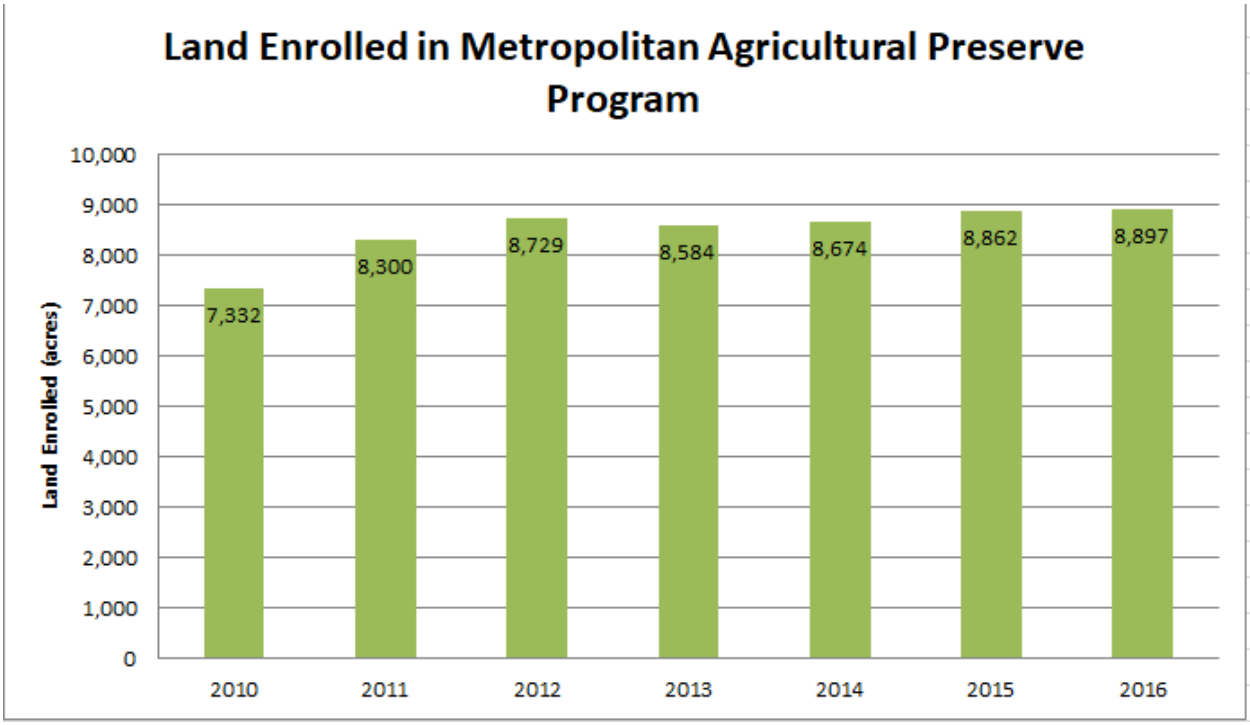
D. Agricultural Property Tax Programs

Land values in the County's unincorporated areas have increased significantly over the past decade due to regional growth pressure and housing development. This means many farmland owners have seen substantial increases in local property taxes. To help alleviate the impact of population growth, tax rate hikes, and associated property value increases, the state has established two tax break programs for farmland owners: the Metropolitan Agricultural Preserve Program and Green Acres.

In 1982, the state enacted the Metropolitan Agricultural Preserve Act. The Act is intended to: 1) preserve land for long-term agricultural use; 2) conserve soil and water resources; and 3) encourage the orderly development of rural and urban land uses. A landowner enters the program by

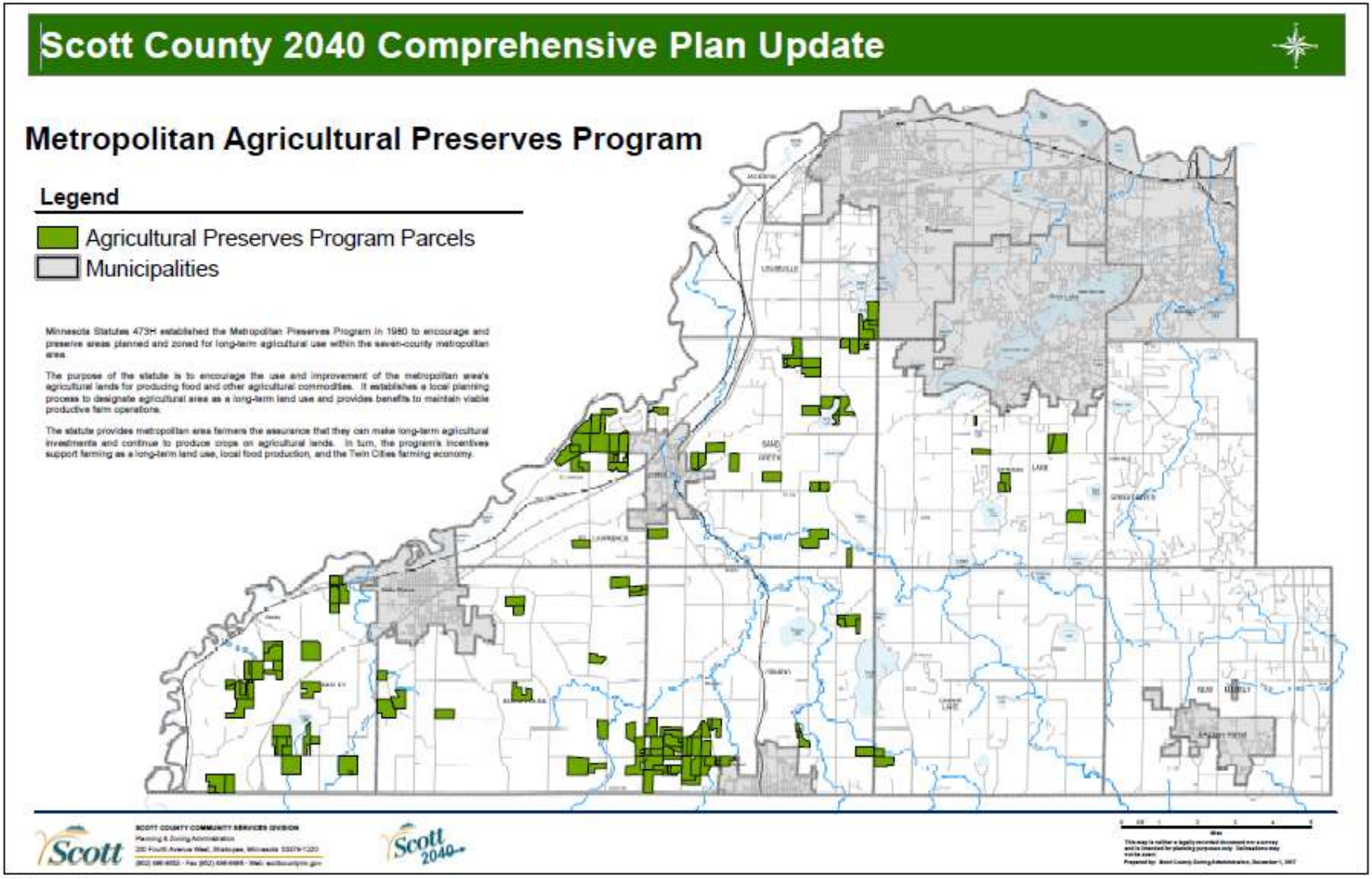
placing a restrictive covenant on the land prohibiting development. In return, the landowner gets certain benefits, including a real estate tax benefit and an agricultural based tax value of the land. Participation in the program is voluntary; however the land must remain in the program for a minimum of eight years before the restrictive covenant can be rescinded. In 2016, roughly 8,900 acres were enrolled in the Metropolitan Agricultural Preserve Program in Scott County (see map for location and Figure VIII – 15 for enrollment trends since 2000).

Figure VIII – 15



The Agricultural Property Tax law, commonly referred to as "Green Acres," was established by the Legislature in 1967 to help preserve farmland in areas experiencing increasing land values (due to nearby land development) by allowing qualified farmers to pay real estate taxes based upon the *agricultural* value of their land rather than the *potential* market value. Taxes are calculated on both values, but paid on the lower, agricultural value each year. The difference between the tax calculated on agricultural market value and the potential market value is deferred until the property is sold or no longer qualifies for the Green Acres program. When the property is sold or no longer qualifies, the deferred tax must be paid for a maximum of three years. In 2017, roughly 71,837 acres in Scott County were enrolled in Green Acres; down roughly 8,000 acres from a decade ago. See map for location of enrolled parcels.

In 2008, a Legislative Audit Commission reported its evaluation of the two agricultural protection programs offered by the state. Included in the report was a finding that both programs can help the shape and pace of development, but are not adequate to preserve farmland for the long-term. Agriculture is expected to remain an important part of Scott County's economy and lifestyle into 2040 and beyond. The 2040 Vision recognizes the value farming has on shaping the county's character but also identifies the need to define the long-term future of agriculture as a strategic challenge. Changing economic factors may encourage farmers to continue or expand their current operations as the demand for corn-, soy-, and grass-based fuels and natural food choices become more profitable.


Scott County 2040 Comprehensive Plan Update
Metropolitan Agricultural Preserves Program
Legend
Agricultural Preserves Program Parcels
Municipalities
Minnesota Statutes 473H established the Metropolitan Preserves Program in 1980 to encourage and preserve areas planned and zoned for long-term agricultural use within the seven-county metropolitan area.
The purpose of the statute is to encourage the use and improvement of the metropolitan area's agricultural lands for producing food and other agricultural commodities. It establishes a local planning process to designate agricultural area as a long-term land use and provides benefits to maintain viable productive farm operations.
The statute provides metropolitan area farmers the assurance that they can make long-term agricultural investments and continue to produce crops on agricultural lands. In turn, the program's incentives support farming as a long-term land use, local food production, and the Twin Cities farming economy.
Scott
SCOTT COUNTY COMMUNITY SERVICES DIVISION
Scott 2040

Scott County 2040 Comprehensive Plan Update
Metropolitan Green Acres Program
Legend
Green Acres Program Parcels
Municipalities
The Green Acres Program provides property tax relief for owners of productive agricultural property in areas where the market value of land is being affected by development pressure, sales of recreational land, or other non-agricultural factors.
Scott
Scott 2040

WATER RESOURCE GOALS AND POLICIES

The following goals and policies are those of the Scott County Water Resources Plan which are incorporated by reference from the 2019 – 2026 Scott Watershed Management Organization Comprehensive Water Resources Management Plan. A more detailed description of each goal can be found in the 2019-2026 Scott Watershed Management Organization Comprehensive Water Resources Management Plan under Section 3 – Goals and Policies on page 3-6. How each of the goals and policies will be implemented can be found under Section 4 – Strategies, starting on page 4-1. In addition, Table 4.1 on page 4-2, provides a quick reference on which Strategies relate to each goal of the Scott Watershed Management Organization. The process for implementing is provided for in more detail in Section 5. (https://www.scottcountymn.gov/1488/Comprehensive-Water-Resource-Plan)

Goal VIII – 1: Wetland Management. To Protect and Enhance Wetland Ecosystems, and To Ensure/Encourage a Measureable Net Gain Of Wetland Functions And Acreage

Policies with respect to goal 1 include:

- Policy 1.1: Preserve Wetlands (no net loss) For Water Retention, Recharge, Soil Conservation, Wildlife Habitat, Aesthetics, and Natural Enhancement of Water Quality.
- Policy 1.2: Protect Wetlands from Impacts Caused by Stormwater Runoff
- Policy 1.3: Enhance and Restore Wetlands

Goal VIII – 2: Surface Water Quality. To Protect and Improve Surface Water Quality

Policies with respect to goal 2 include:

- Policy 2.1: Promote a Sustainable Systems of Buffers and Green Infrastructure
- Policy 2.2: Prevent Further Degradation
- Policy 2.3: Address Impaired Waters and Improve Water Quality
- Policy 2.4: Improve Understanding of Water Quality
- Policy 2.5: Coordinate with other agencies and water quality programs
- Policy 2.6: Promote Source Protection

Goal VIII – 3: To Protect Groundwater Quality and Supplies

Policies with respect to groundwater protection include:

- Policy 3.1: Preserve and protect groundwater quality and quantity
- Policy 3.2: Improve Understanding of Groundwater Resources

Goal VIII – 4: Flood Management. To protect human life, property, and surface water systems from damage caused by flood events.

Policies with respect to flood management include:

- Policy 4.1: Minimize flooding risk for and from, new and re-development, by regulating: 1) activities in the floodplain, 2) placement of structures in flood prone areas, and 3) the loss of floodplain capacity
- Policy 4.2: Manage new development and drainage alterations to prevent increases in flood flows and downstream impacts
- Policy 4.3: Promote and ensure maintenance of drainage and stormwater systems
- Policy 4.4: Minimize the risk of flooding by promoting a regional approach to stormwater management and maximizing upstream storage
- Policy 4.5: Address known regional flooding concerns and problems that have cross jurisdictional implications and /or origin
- Policy 4.6: Address local flooding concerns in Local Water Plans
- Policy 4.7: Improve understanding of flooding risks

Goal VIII – 5: Collective Action. Increase Adoption of Actions and Practices that Protect and Improve Water Resources

Policies with respect to collective action include:

- Policy 5.1: Improve understanding of both the social and biophysical systems at play locally
- Policy 5.2: Make programs locally relevant
- Policy 5.3: Engage locally
- Policy 5.4: Building strong relationship and enduring partnerships
- Policy 5.5: Learn by doing and adapt quickly

Goal VIII – 6: Optimize Public Expenditure

Specific policies related to this goal include:

- Policy 6.1: Foster on-going communication and coordination with other agencies and jurisdictions
- Policy 6.2: Promote collaborative decision making
-
- Policy 6.3: Note SWMO policy 6.3 was not adopted as it is specific to the SWMO levy

- Policy 6.4: Maintain Consistency of the county's official controls related to water resources
- Policy 6.5: Minimize Redundancy
- Policy 6.6: Use County and SWCD staff unless:
    - Partnering or contracting is more economical,
    - The needed expertise does not exist with County or SWCD staff,
    - County or SWCD staff do not have the time,
    - The effort does not involve building relationships,
    - It is a one-time effort and not a routine effort,
    - The effort does not depend on existing relationships or contracting and does not conflict with statutory responsibilities, or
    - Additional resources that would not otherwise be brought to the effort are compromised.
- Policy 6.7: Regularly Assess Programs and Progress
- Policy 6.8: Pool and share resources
- Policy 6.9: Engage Volunteers

Goal VIII – 7: Build a Resilient Landscape

Resiliency is the ability to recover from an impact or disaster. It is important for the County given the 2014 Presidential Disaster declaration, and increasing rainfall amounts and intensities. Resiliency can be built in a number of ways. Regulations can be used to make sure that homes, businesses and infrastructure are built in areas out of harm's way, or that prevent stormwater runoff from increasing and adding to problems. County policies related to this means of building resiliency are already covered under Goal 4: Flood Management, specially:

- Policy 4.1: Minimize flooding risk for and from, new and re-development, by regulating: 1) activities in the floodplain, 2) placement of structures in flood prone areas, and 3) the loss of floodplain capacity
- Policy 4.2: Manage new development and drainage alterations to prevent increases in flood flows and downstream impacts

Resiliency can also be built by managing healthy soils and diverse plant communities, and protecting and enhancing natural system functions that help moderate impacts. Goal 1: Wetland Management and Goal 2: Surface Water Quality include some policies along these lines, specifically:

- Policy 1.1: Preserve Wetlands (no net loss) For Water Retention, Recharge, Soil Conservation, Wildlife Habitat, Aesthetics, and Natural Enhancement of Water Quality.
- Policy 1.3: Enhance and Restore Wetlands

- Policy 2.1: Promote a Sustainable Systems of Buffers and Green Infrastructure

Additional policies added with this goal include:

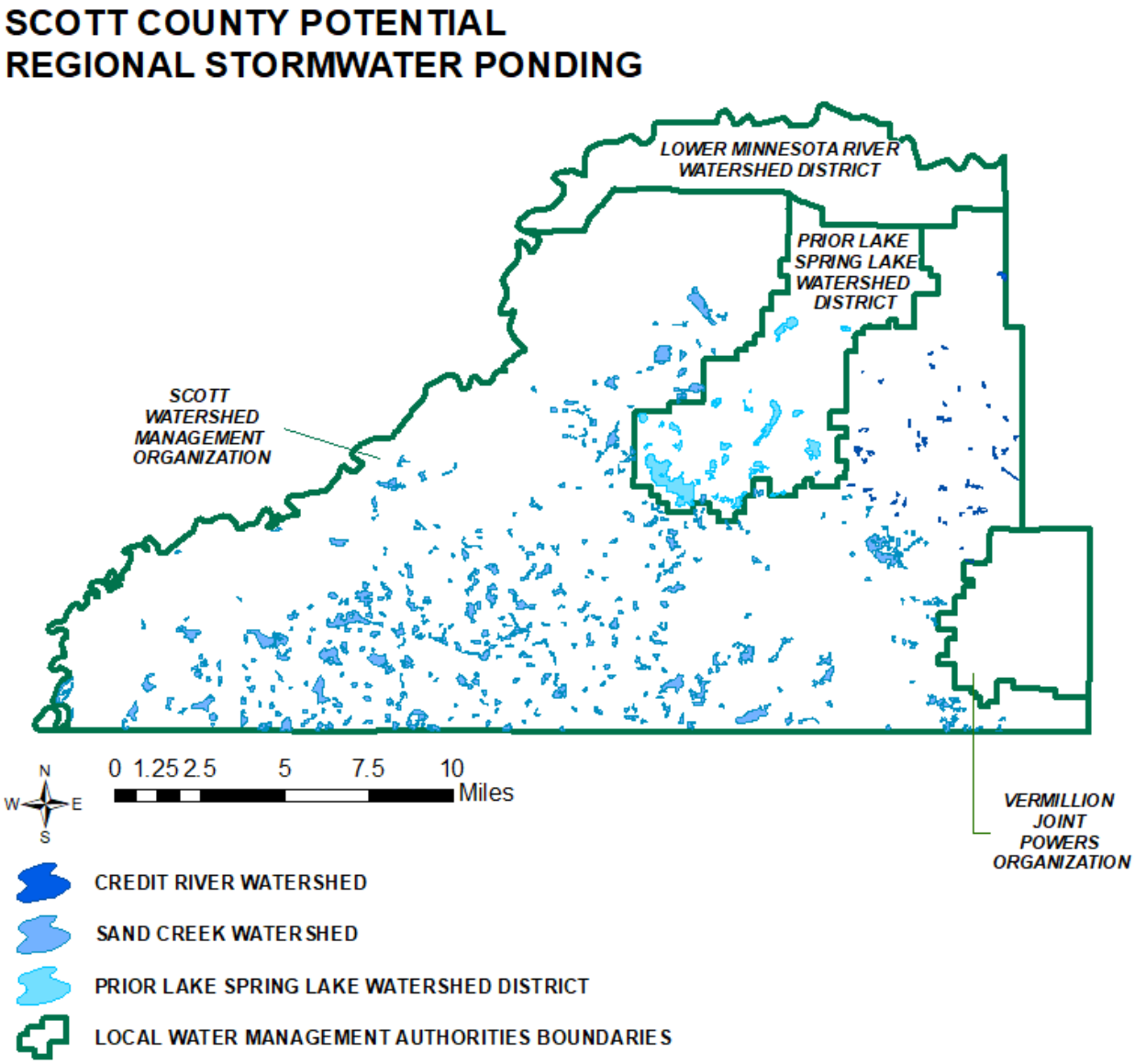
- Policy 7.1: Prioritizing the protection and improvement of soil health
- Policy 7.2: Prioritizing the establishment of year round living vegetative cover
- Policy 7.3: Maximizing vegetative diversity

Goal VIII – 8: Public Drainage. Maximize the public value of the public drainage systems

Policies related to this goal include:

- Policy 8.1: Facilitate a vision for management of selected public ditches as agricultural drainage benefits decline.

Map VIII – 18:


SCOTT COUNTY POTENTIAL
REGIONAL STORMWATER PONDING
LOWER MINNESOTA RIVER WATERSHED DISTRICT
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
SCOTT WATERSHED MANAGEMENT ORGANIZATION
VERMILLION JOINT POWERS ORGANIZATION
N
W
E
S
0 1.25 2.5 5 7.5 10
Miles
CREDIT RIVER WATERSHED
SAND CREEK WATERSHED
PRIOR LAKE SPRING LAKE WATERSHED DISTRICT
LOCAL WATER MANAGEMENT AUTHORITIES BOUNDARIES

NATURAL AREA CORRIDORS GOALS AND POLICIES

Goal #VIII-9 Encourage developments to fit the natural landscape through appropriate design and ensure the protection and enhancement of natural physical features such as floodplains, lakes, wetlands, vegetation, hydric soils, and steep slopes.

a. Encourage artificially drained hydric soils to revert to natural conditions and the restoration of wetlands using the Public Value Incentive Program.

b. Development on slopes identified as potential problem areas due to erosion or slope stability concerns shall be restricted or prohibited. Methods of controlling erosion or unstable slopes shall be indicated on all development requests.

c. Promote the use of native grasses, forbes, shrubs, and trees in development site restoration.

d. Establish compatible land use patterns that relate to the county's environmental features.

e. Promote the preservation of natural vegetation including prairies, woodlands, and wetlands as a design consideration for new subdivisions and developments and encourage preservation of high quality natural areas using the Public Value Incentive Program.

f. Require that all building permits and subdivisions comply with Minnesota Department of Natural Resources floodplain standards and shoreland statutes.

g. Promote restoration and utilization of natural storm water storage areas for wildlife, aesthetics, and storm water management.

h. Require natural vegetative buffer areas along all bluffs, lakes, wetlands, creeks, and drainageways.

a. Promote restoration of upland and wetland areas (see also Goal #VIII-2 for wetland restoration and protection.

Goal#VIII-10 Protect environmentally sensitive areas characterized by hydric soils, steep slopes, tree massing, wetlands, lakes, floodplains, and shorelands from degradation.

a. Use the Natural Area Corridors map of high and medium priority natural resource areas for guiding land use development decisions.

b. Require developers to identify environmentally sensitive natural resources, which may be impacted by their development.

c. Promote the use of concentrated and cluster development concepts to encourage protection of natural features and prime agricultural land.

d. Ensure the proper protection and preserve high priority environmentally sensitive areas to ensure long-term protection using a suite of tools, from the Public Value Incentive Program to acquisition of conservation easements from willing landowners.

e. Promote the protection and management of woodland resources.

f. Coordinate with and promote programs by the Scott SWCD and watershed organizations that protect environmentally sensitive areas.

g. Follow the bluff protection standards established by the SWMO and the LMRWD.

Goal#VIII-11 Establish natural resource corridors that link and protect natural open spaces and environmentally sensitive areas, to retain the rural character of Scott County and provide for wildlife corridors.

a. Provide incentives through the Public Value Incentive Program for developments to preserve natural resource areas (common areas, conservation easements, or part of lots) to serve as open space, natural environment areas, and to define rural residential areas.

b. Coordinate with townships, cities, Three Rivers Park District, Watershed Management Organizations, Scott SWCD and DNR to acquire and manage high value natural resources that serve as open space, natural environment areas, and help define rural residential areas.

Goal#VIII-12 Increase the awareness of the value and importance of natural resources, their protection, restoration, and stewardship.

a. Inform landowners on the proper application and rates of herbicides, pesticides, and phosphorous fertilizers on lawns to prevent runoff to wetland areas and to prevent contamination of ground water and surface water resources.

b. Inform landowners on the control of invasive/exotic plant species in lakes, greenways, and natural areas and open spaces.

c. Implement a volunteer program for open space maintenance and citizen stewardship activities.

d. Inform landowners on the importance of habitat and natural communities management (e.g., lakescaping for wildlife and water quality, stream riparian vegetation management, woodland management, and prairie management).

e. To reduce public cost, support natural resource protection alternatives available through conservation organizations and natural environment programs.

f. Provide technical assistance for landowners interested in natural resources stewardship.

g. Support the Scott Clean Water Education Program (SCWEP) by the Scott SWCD.

Goal#VIII-13 Work to establish a regionally-focused land use and transportation planning process that will ensure the preservation and management of both "green infrastructure" (i.e., Natural Area Corridors) and "gray infrastructure" (i.e., highways, bridges).

a. Promote a seamless transportation and greenway system encompassing trails, transitways, and all functional classes of roadways.

b. Consider Natural Area Corridors in the placement, design, and construction of transportation infrastructure.

c. Coordinate with the Scott SWCD and SWMO to create wetland banks and prioritize local replacement.

AGRICULTURAL RESOURCE GOALS AND POLICIES

Goal #VIII-14 Protect and preserve agricultural uses and the economic viability of farming operations.

a. The preservation of agricultural uses and operating farms within the agricultural areas shall be a priority in all planning and development decisions. Coordinate with the U of M Extension Service where appropriate.
Reason: Maintaining expansive farming areas is an important element of the County's 2040 Vision. Prime agricultural land is a resource that should be protected at a priority reflective of its relative benefit to society.

b. Limit residential development in the areas planned for long-term agriculture to very low densities that preserve the majority of the land for agricultural purposes.
Reason: Residential development in long-term agricultural areas should be limited due to the importance of agriculture on the local economy and the lack of necessary infrastructure to handle new growth.

c. Support local, state, and federal programs designed to assist farming operations, support conservation and natural resource management programs, and provide educational and public informational services. These programs include enrollment in the Agricultural Preserves and Green Acres programs.
Reason: Agriculture is a local industry that provides jobs and taxes for residents. Conservation programs protect natural and water resources that enable agriculture to be sustainable.

d. Promote a locally-based food production system by preserving small lot farms used for fruit and vegetable production; supporting public institutions in purchasing food grown within the County; assisting in improving connections between local food producers and consumers; and assisting local governments in developing strategies that will promote a locally-based food production system.

e. Periodically engage a farmer advisory group to form recommendations regarding maintaining the viability of farming and preserving farmland in Scott County. The group should consist of farmers from a variety of farming operations within Scott County.
Reason: Receiving input from the farmer advisory group will help position the County to develop and implement policies that support farmers and their farming operations to ensure agriculture remains a viable industry.

Goal #VIII-15 Encourage agricultural land uses to operate in a manner that is consistent with this Plan's goals and policies for water and natural resources and parks, trails, and open space.

a. Agricultural land uses should be encouraged to utilize best management practices and observe conservation practices that prevent erosion and preserve natural resources.
Reason: Agriculture is an intensive land use because it has the potential for significant impacts on storm water conveyance systems, ground water resources and air quality. Agriculture is a necessary land use for society but can be accomplished with reduced adverse impacts by adhering to recognized best management practices. Failure to do so can destroy the long-term productivity of the land and contaminate ground water resources for future generations, resulting in flooding, erosion problems, and air pollution.

b. New or expanding feedlots resulting in over 500 animal units or more shall be regulated to minimize impacts on existing residences and the environment.
Reason: Large feedlots present the potential for greater impacts to the environment than traditional smaller labor intensive operations. Feedlots and resulting manure management present increased concerns for ground water protection, air quality, storm water runoff, insect control, and public health. These intensive land uses should be controlled to prevent adverse impacts that are detrimental to society and the long-term economy of the area.

c. Explore opportunities through the University of Minnesota's Resilient Communities Program or similar student-led research programs to address items such as identifying methods to diversifying agricultural land with perennial crops.

d. Coordinate with Scott SWCD and the watershed management organizations to provide technical and financial assistance to assist landowners and farmers with protecting and improving the health of their soils, and protect their land from excessive erosion.

Goal #VIII-16 Protect active farming operations from the encroachment of conflicting residential land uses through the use of clustering.

a. Clustering of residential development shall be limited to areas where it can be demonstrated that it does not conflict with agricultural uses.
Reason: Clustering of residential uses into areas, which are less productive and which do not conflict with the primary land use, provides for some economic support to farmers who have land less suitable for farming. It also provides a residential living option to satisfy this relatively small market need.

Goal #VIII-17 Support the protection of farming from nuisance violations when conflicts between agricultural uses and residential development occur.

a. When nuisance complaints and conflicts occur between agricultural practices and land uses, agriculture—because of its long and vital economic benefits and historical roots—will be considered to be the prevailing land use.
Reason: Farming remains a vital industry in parts of central and southwestern Scott County. While growth continues in the unincorporated areas, responses from previous planning surveys indicated residents support the longevity of agricultural practices and protection of farmers' rights from new developments.

b. Encourage townships to adopt Right-to-Farm ordinances based on state regulations. Nuisance violations related to non-agricultural operations shall not be protected by Right-to-Farm ordinances.
Reason: To protect farmers from nuisance complaints and help sustain agricultural uses, Right-to-Farm ordinances have been established throughout the state and nation. These ordinances prevent neighboring property owners from filing nuisance complaints based on conventional agricultural operations.

AGGREGATE RESOURCE GOALS AND POLICIES

Goal #VIII-18 Preserve and protect non-metallic mineral deposits.

a. Identify significant deposits of aggregate materials (includes sand, gravel, silica sand, crushed rock and limestone), and where appropriate, consider preservation and protection for future access and resource-based activities that provide for a diverse, regional, and sustainable economy and environment.

b. Aggregate mining shall be allowed as an interim land use as appropriate within the zoning districts established in the County Zoning Ordinance. Extraction shall follow strict standards for operations and end use reclamation that provides compatibility with nearby land uses and leaves at least 25% to 50% of the net developable acreage of the property under mining permit in a condition that allows for future extension of roads and/or utilities to develop the aggregate mining site for tax-generating land uses typical of those within the zoning district in which the site is located. Not all properties have the same potential for development prior to issuance of an Interim Use Permit due to environmental, natural resource, soil and bedrock conditions for each particular site, so an analysis of the potential for development for each property prior to any Interim Use Permit being prepared is necessary to determine the amount of acreage that should be reclaimed for future development.
Reason: Aggregate resources are needed by society. Gravel removal operations are generally compatible land uses in industrial and rural areas. However, mining should be looked at as an interim use rather than an end use of the land. End uses should be compatible with surrounding land uses and in conformance with the comprehensive plan.

c. The siting and operation of aggregate mining operations shall consider compatibility with adjoining and planned land uses and mitigation measures to reduce nuisance concerns such as noise, dust, hours of operation, and traffic.

e. Restrict portable concrete/asphalt plants to permitted aggregate mining operations.
Reason: Temporary concrete and asphalt plants present land use concerns similar to aggregate mining operations and are associated with aggregate mining in areas where road construction is occurring sufficiently to sustain their viability.

f. Encourage aggregate resources to be extracted prior to development of an aggregate-rich site.
Reason: Due to increasing demand and shrinking supply of construction grade resources, aggregates should be removed from a site before development occurs.

g. If the proposed end land use of the aggregate mining site is for natural area conservation of wildlife protection or if it is determined that a proposed end use for development is unlikely for a given property, requirements in the mining permit should be put in place to ensure ecological enhancement and long-term financial stewardship of the land to sustain the environmental value of the property.

Map VIII – 19: Planned Land Use with Aggregate Deposit Overlay